UNITED STATES PATENT AND TRADEMARK OFFICE

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		EXAMINER
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Lars O. Scofield
i411, INC.
14320-D Scullyfield Circle
Chantilly, VA 20151

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Please find below and/or attached an Office communication concerning this application or proceeding.

PTO-90C (Rev. 10/03)

	Application No.	Applicant(s)
Office Action Summary	09/820,662	TALIB ET AL.
	Examiner	Art Unit
	Khanh B. Pham	2177

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE _3_ MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.
- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on _02 December 2003 and 05 February 2004._

2a)☒ This action is **FINAL**.   2b)☐ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) _1-30_ is/are pending in the application.

    4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) _1-30_ is/are rejected.

7)☒ Claim(s) _1, 11 and 21_ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

    Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

    Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. §§ 119 and 120

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

    a)☐ All b)☐ Some * c)☐ None of:

      1.☐ Certified copies of the priority documents have been received.

      2.☐ Certified copies of the priority documents have been received in Application No. _____.

      3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

    * See the attached detailed Office action for a list of the certified copies not received.

13)☒ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application) since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78.

    a) ☐ The translation of the foreign language provisional application has been received.

14)☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121 since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78.

Attachment(s)

1)☐ Notice of References Cited (PTO-892)		4)☐ Interview Summary (PTO-413) Paper No(s). _____ .	
2)☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)		5)☐ Notice of Informal Patent Application (PTO-152)	
3)☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____ .		6)☐ Other: .	

DETAILED ACTION

Response to Amendment

1.   The amendment filed December 2, 2003 and the supplemental amendment filed

February 5, 2004 have been entered. The specification has been amended. Claims 1,

10, 11, 14-30 have been amended. Claims 31-37 have been canceled.

Claim Objections

2. Claims 1 is objected to because of the following informalities:

- The step labels "a)" to "h)" should be deleted to match original claims.

- The semicolons ";" at the end of lines 4, 5, 6 should be replaced by colons ",".

5. Claims 11 is objected to because of the following informalities:

- The step labels "a)" to "g)" in claim 11 should be deleted to match the original

    claim.

- The semicolons ";" at the end of lines 7, 8, 9 should be replaced by colons ",".

6. Claim 21 is objected to because of the following informalities:

- The step labels "a)" to "h)" should be deleted to match the original claim.

- The semicolons ";" at the end of lines 4, 5, 6, 7 should be replaced by colons ",".

Appropriate correction is required.

Claim Rejections - 35 USC § 112

7. The following is a quotation of the second paragraph of 35 U.S.C. 112:

> The specification shall conclude with one or more claims particularly pointing out and distinctly
> claiming the subject matter which the applicant regards as his invention.

8. Claims 22-30 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

9. Claims 22-23, 25, 27-29 recite the limitation "The method according to claim 20". There is insufficient antecedent basis for this limitation in the claim.

10. Claim 26 recites the limitation: "the string" in line 1. There is insufficient antecedent basis for this limitation in the claim.

For purpose of examination, the examiner presumes claims 22-23, 25, 27-29 depend on claim 21.

Claim Rejections - 35 USC § 103

11. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set
> forth in section 102 of this title, if the differences between the subject matter sought to be patented and
> the prior art are such that the subject matter as a whole would have been obvious at the time the
> invention was made to a person having ordinary skill in the art to which said subject matter pertains.
> Patentability shall not be negatived by the manner in which the invention was made.

12. **Claims 1-30 are rejected under 35 U.S.C. 103(a)** as being unpatentable over Wical (US 5,940,821 A) and in view of Seilhamer et al. (US 6,023,659A).

As per claim 1, Wical teaches a system for searching data comprising:

- "an organizer configured to receive search requests, said organizer comprising: a data collection having at least two entries" at Col. 2 lines 40-65;

- "wherein the data collection is organized into at least two taxonomies; wherein each of the at least two taxonomies is associated with at least two categories" at Col. 2 lines 40-65 and Figs. 3-4, 8A-C, 9AC ;

- "wherein the entries correspond to at least one of the at least two taxonomies and also correspond to at least one of the at least two categories" at Figs. 3-4, 8A-C, 9AC;

- "a search engine in communication with the organizer, wherein the search engine is configured to search based on the at least two taxonomies and based on the at least two categories" at Col. 25 lines 10-60;

- "wherein the search engine returns, in response to a search request identifying at least a first taxonomy of the at least two taxonomies, a list of the categories associated with the at least first identified taxonomies, along with the number of entries associated with each of the categories associated with the at least first identified taxonomies" at Col. 25 lines 27-45 and Figs. 10A-C.

The difference between Wical and the invention of claim 1 is that the claim relates to "a bioinformatics data collection" whereas Wical relates to a data collection include "a compilation of information from any sources" (Col. 5 lines 54-55) and does not explicitly indicate that the data collection is "a bioinformatics data collection" as claimed.

However, "bioinformatics data collection" is well known in the art, as exemplified by Seilhamer's invention, which relates to "relational databases for storing and retrieving biological information" (Col. 1 lines 24-25). Consider this, it would have been obvious to those of ordinary skilled in the art at the time of the invention to apply Wical's invention to "a bioinformatics data collection" as claimed because as indicated by Seilhamer, *"increasingly, molecular biology is shifting from the laboratory bench to the computer desktop. Today's researchers require advanced quantitative analyses, database comparisons, and computational algorithms to explore the relationships between sequence and phenotype. Thus, by all account, researchers cannot and will not be able to avoid using computer resources to explore gene expression, gene sequencing, and molecular structure"* (Col. 1 lines 35-43). Consequently, the computerization of bioinformation data collection would enable users of Wical's system to more effectively manage collected data pertaining to human genes.

As per claim 2, Wical and Seilhamer teach the system according to claim 1 as stated above. Seilhamer also teaches:

- "the returned list of categories associated with the at least one first taxonomies, along with the number of entries associated with each of the categories associated with the identified taxonomies can be further searched with regard to at least a second taxonomy of the at least two taxonomies" at Col. 23 lines 5-30;

- "whereby the search engine returns, in response to a search request identifying the at least second taxonomies of the at least two taxonomies, a list of the categories associated with both identified taxonomies, along with the number of entries associated with each of the categories associated with the second taxonomies" at Col. 23 lines 5-30 and Col. 34 lines 30-43.

As per claim 3, Wical and Seilhamer teach the system according to claim 1 as stated above. Wical also teaches: "wherein the search engine, having returned, in response to a search request identifying at least a first taxonomy of the at least two taxonomies, a list of the categories associated with the identified taxonomies, along with the number of entries associated with each of the categories associated with the identified taxonomies, will provide only those categories with a non-zero number of entries associated with the identified taxonomies and will further return sub-categories both associated with the category and having a non-zero number of entries associated with the sub-category" at Col. 25 lines 10-45 and Figs 10B-C.

As per claim 4, Wical and Seilhamer teach the system according to claim 3 as stated above. Wical also teaches: " wherein the search engine, having further returned sub-categories both associated with the category and having a non-zero number of entries associated with the sub-category, will, in response to a search request identifying at least a second taxonomy of the at least two taxonomies, provide a list of the categories with a non-zero number of entries associated with the at least second identified taxonomies, along with the number of entries associated with each of the

categories associated with the at least second identified taxonomies" at Col. 25 lines 10-45 and Figs. 10A-C.

As per claim 5, Wical and Seilhamer teach the system according to claim 1 as stated above. Wical also teaches: "wherein the search engine, having returned, in response to a search request identifying at least a first taxonomy of the at least two taxonomies, a list of the categories associated with the identified taxonomies, along with the number of entries associated with each of the categories associated with the identified taxonomies, will, in response to a string query, provide those entries which both contain the string and are associated with the identified taxonomies" at Col. 25 lines 10-45 and Figs. 10A-C.

As per claim 6, Wical and Seilhamer teach the system according to claim 5 as stated above. Wical also teaches: "wherein the string is one member of the group consisting of text, image, and graphic" at Figs. 11A-B.

As per claim 7, Wical and Seilhamer teach the system according to claim 1 as stated above. Wical also teaches: "wherein the system comprises a network of computers" at Col. 5 lines 55-60.

As per claim 8, Wical and Seilhamer teach the system according to claim 1 as stated above. Wical also teaches: "the system comprises a single computer" at Fig. 14.

As per claim 9, Wical and Seilhamer teach the system according to claim 1 as stated above. Wical also teaches: "the system further comprises a cache which stores the returned results of the search engine for rapid retrieval" at Col. 31 lines 65-67.

As per claim 10, Wical and Seilhamer teach the system for searching data according to claim 1 as stated above. Seilhamer also teaches: "at least one taxonomy of the at least two taxonomies is selected from the group consisting of organism, biological process, molecular function, species, and cellular component" at Col. 7 lines 35-55 and Col. 24 lines 5-25.

As per claim 11, Wical teaches a system for searching data comprising:

- "means for networking a plurality of computers" at Col. 32 lines 30-37;

- "means for organizing executing in said computer network and configured to receive search requests from any one of said plurality of computers, said means for organizing comprising: a data collection having at least two entries" at Col. 2 lines 40-65;

- "wherein said data collection is organized into at least two taxonomies; wherein each of the at least two taxonomies is associated with at least two categories" at Col. 2 lines 40-65 and Figs. 3-4, 8A-C, and 9A-C;

- "wherein the entries correspond to at least one of the at least two taxonomies and also correspond to at least one of the at least two categories" at Figs. 3-4, 8A-C, and 9A-C;

- "and means for searching in communication with said data collection, wherein said means for searching is configured to search based on the at least two taxonomies and based on the at least two categories" at Col. 25 lines 10-60;

- "wherein the means for searching returns, in response to a search request identifying at least one of the at least two taxonomies, a list of the categories associated with the identified taxonomies, along with the number of entries associated with each of the categories associated with the identified taxonomies" at Col. 25 lines 27-45 and Figs. 10A-C.

The difference between Wical and the invention of claim 11 is that the claim relates to "a bioinformatics data collection" whereas Wical relates to a data collection include "a compilation of information from any sources" (Col. 5 lines 54-55) and does not explicitly indicate that the data collection is "a bioinformatics data collection" as claimed.

However, "bioinformatics data collection" is well known in the art, as exemplified by Seilhamer's invention, which relates to "relational databases for storing and retrieving biological information" (Col. 1 lines 24-25). Consider this, it would have been obvious to those of ordinary skilled in the art at the time of the invention to apply Wical's invention to "a bioinformatics data collection" as claimed because, as indicated by Seilhamer, *"increasingly, **molecular biology is shifting from the laboratory bench to the computer desktop**. Today's researchers require advanced quantitative analyses, database comparisons, and computational algorithms to explore the relationships between sequence and phenotype. Thus, by all account, **researchers cannot and will not be able to avoid using computer resources to explore gene expression, gene sequencing, and molecular***

structure" (Col. 1 lines 35-43). Consequently, the computerization of bioinformation

data collection would enable users of Wical's system to more effectively manage

collected data pertaining to human genes.

As per claim 12, Wical and Seilhamer teach the system according to claim 11 as

stated above. Seilhamer also teaches:

- "the returned list of categories associated with the at least first taxonomy, along
  with the number of entries associated with each of the categories associated with
  the identified taxonomies can be further searched with regard to at least a
  second of the at least two taxonomies" at Col. 23 lines 5-30;

- "whereby the means for searching returns, in response to a search request
  identifying the at least second taxonomy of the at least two taxonomies, a list of
  the categories associated with all identified taxonomies, along with the number of
  entries associated with each of the categories associated with the at least
  second taxonomy" at Col. 23 lines 5-30 and Col. 34 lines 30-43.

As per claim 13, Wical and Seilhamer teach the system according to claim 11 as

stated above. Wical also teaches: "the means for searching, having returned, in

response to a search request identifying at least a first taxonomy of the at least two

taxonomies, a list of the categories associated with the identified taxonomies, along with

the number of entries associated with each of the categories associated with the

identified taxonomies, will provide only those categories with a non-zero number of

entries associated with the identified taxonomies and will further provide sub-categories

associated with the category and having a non-zero number of entries associated with

the sub-category" at Col. 25 lines 10-45 and Figs. 10B-C.

As per claim 14, Wical and Seilhamer teach the system according to claim 11 as

stated above. Wical also teaches: "the means for searching, having further returned

sub-categories both associated with the category and having a non-zero number of

entries associated with the sub-category, will, in response to a search request

identifying at least a second taxonomy of the at least two taxonomies, provide a list of

the categories with a non-zero number of entries associated with the at least second

identified taxonomy, along with the number of entries associated with each of the

categories associated with the at least second identified taxonomy" at Col. 25 lines 10-

45 and Figs. 10A-C.

As per claim 15, Wical and Seilhamer teach the system according to claim 13 as

stated above. Wical also teaches: "the means for searching, having returned, in

response to a search request identifying at least a first taxonomy of the at least two

taxonomies, a list of the categories associated with the identified taxonomies, along with

the number of entries associated with each of the categories associated with the

identified taxonomies, will, in response to a string query, provide those entries which

both contain the string and are associated with the identified taxonomies" at Col. 25

lines 10-45 and Figs. 10A-C.

As per claim 16, Wical and Seilhamer teach the system according to claim 5 as stated above. Wical also teaches: "the string is one member of the group consisting of text, image, and graphic" at Figs. 11A-B.

As per claim 17, Wical and Seilhamer teach the system according to claim 11 as stated above. Wical also teaches: "the system comprises a network of computers" at Col. 5 lines 55-60.

As per claim 18, Wical and Seilhamer teach the system according to claim 11 as stated above. Wical also teaches: "the system comprises a single computer" at Fig. 14.

As per claim 19, Wical and Seilhamer teach the system according to claim 11 as stated above. Wical also teaches: "the system further comprises a cache which stores the returned results of the means for searching for rapid retrieval" at Col. 31 lines 65-67.

As per claim 20, Wical and Seilhamer teach the system according to claim 11 as stated above. Seilhamer also teaches: "at least one taxonomy of the at least two taxonomies is selected from the group consisting of organism, biological process, molecular function, species, and cellular component" at Col. 7 lines 35-55 and Col. 24 lines 5-25.

As per claim 21, Wical teaches a method for searching a data collection comprising:

- "communicating a search request to a search engine, the search engine being in communication with a data collection, wherein the data collection has at least two entries" at Col. 2 lines 40-65;

- "wherein the data collection is organized into at least two taxonomies; wherein each of the at least two taxonomies is associated with at least two categories" at Col. 2 lines 40-65 and Figs. 3-4, 8A-C, 9A-C;

- "wherein the at least two entries correspond to at least one of the at least two taxonomies and also correspond to at least one of the at least two categories" at Fig. 3-4, 8A-C;

- "querying of the data collection by the search engine based on the communicated search request; wherein the communicated search request identifies at least one of the at least two taxonomies; returning of a list of the categories associated with the at least one identified taxonomy, along with the number of entries associated with each of the categories associated with the at least one identified taxonomy as a response to the querying of the bioinformatics collection" at Col. 25 lines 27-45 and Figs. 10A-C.

The difference between Wical and the invention of claim 21 is that the claim relates to "a bioinformatics collection" whereas Wical relates to a data collection include "a compilation of information from any sources" (Col. 5 lines 54-55) and does not explicitly indicate that the data collection is "a bioinformatics collection" as claimed.

However, "bioinformatics data collection" is well known in the art, as exemplified

by Seilhamer's invention, which relates to "relational databases for storing and retrieving

biological information" (Col. 1 lines 24-25). Consider this, it would have been obvious to

those of ordinary skilled in the art at the time of the invention to apply Wical's invention

to "a bioinformatics collection" as claimed because as indicated by Seilhamer,

"*increasingly, molecular biology is shifting from the laboratory*

bench to the computer desktop. Today's researchers require

advanced quantitative analyses, database comparisons, and

computational algorithms to explore the relationships between

sequence and phenotype. Thus, by all account, researchers cannot

and will not be able to avoid using computer resources to

explore gene expression, gene sequencing, and molecular

structure" (Col. 1 lines 35-43). Consequently, the computerization of bioinformation

data collection would enable users of Wical's system to more effectively manage

collected data pertaining to human genes.

As per claim 22, Wical and Seilhamer teach the method according to claim 21

as stated above. Seilhamer also teaches: "the method further comprises returning, in

response to a search request identifying at least a second taxonomy of the at least two

taxonomies, a list of the categories associated with all identified taxonomies, along with

the number of entries associated with each of the categories associated with the at least

second taxonomy" at Col. 23 lines 5-30.

As per claim 23, Wical and Seilhamer teach the method according to claim 21

as stated above. Wical also teaches: "the method further comprises returning a list of

only those categories with a non-zero number of entries associated with the identified

taxonomies and further returning at least one sub-category associated with the category

and having a non-zero number of entries associated with the sub-category" at Fig. 10B.

As per claim 24, Wical and Seilhamer teach the method according to claim 22

as stated above. Wical also teaches: "the method further comprises having further

returned sub-categories both associated with the category and having a non-zero

number of entries associated with the sub-category, providing, in response to a search

request identifying at least a second taxonomy of the at least two taxonomies, provide a

list of the categories with a non-zero number of entries associated with the at least

second identified taxonomy, along with the number of entries associated with each of

the categories associated with the at least second identified taxonomy" at Col. 25 lines

10-45 and Figs. 10B-C.

As per claim 25, Wical and Seilhamer teach the method according to claim 21

as stated above. Wical also teaches: "the method further comprises returning, in

response to a string query, provide those entries which both contain the string and are

associated with the identified taxonomy" at Figs. 11A-B.

As per claim 26, Wical and Seilhamer teach the method according to claim 24

as stated above. Wical also teaches: "wherein the string is one member of the group

consisting of text, image, and graphic" at Figs. 11A-B.

As per claim 27, Wical and Seilhamer teach the method according to claim 21 as stated above. Wical also teaches: "the system comprises a network of computers" at Col. 5 lines 55-60.

As per claim 28, Wical and Seilhamer teach the method according to claim 21 as stated above. Wical also teaches: "the system comprises a single computer" at Fig. 14.

As per claim 29, Wical and Seilhamer teach the method according to claim 21 as stated above. Wical also teaches: "wherein the system further comprises a cache which stores the returned results of the means for searching for rapid retrieval" at Col. 31 lines 65-67.

As per claim 30, Wical and Seilhamer teach the method according to claim 25. Seilhamer also teaches: "wherein at least one taxonomy of the at least two taxonomies is selected from the group consisting of organism, biological process, molecular function, species, and cellular component" at Col. 7 lines 35-55 and Col. 24 lines 5-25.

Response to Arguments

13. Applicant's arguments filed December 2, 2003 have been fully considered but they are not persuasive. The examiner respectfully traverses applicant's arguments.

In response to applicant's argument that there is no suggestion to combine the references, the examiner recognizes that obviousness can only be established by combining or modifying the teachings of the prior art to produce the claimed invention

where there is some teaching, suggestion, or motivation to do so found either in the references themselves or in the knowledge generally available to one of ordinary skill in the art. See *In re Fine*, 837 F.2d 1071, 5 USPQ2d 1596 (Fed. Cir. 1988)and *In re Jones*, 958 F.2d 347, 21 USPQ2d 1941 (Fed. Cir. 1992). In this case, as stated in the 103 rejection above, Wical teach each limitations of claim 1 except that the invention of claim 1 relates to "a bioinformatics data collection" whereas Wical relates to a data collection includes "a compilation of information from any sources" (Col. 5 lines 54-55).

However, "bioinformatics data collection" is well known in the art, as exemplified by Seilhamer's invention, which relates to "relational databases for storing and retrieving biological information" (Col. 1 lines 24-25). Consider this, it would have been obvious to those of ordinary skilled in the art at the time of the invention to apply Wical's invention to "a bioinformatics data collection" as claimed because as indicated by Seilhamer, "*increasingly, molecular biology is shifting from the laboratory bench to the computer desktop. Today's researchers require advanced quantitative analyses, database comparisons, and computational algorithms to explore the relationships between sequence and phenotype. Thus, by all account, researchers cannot and will not be able to avoid using computer resources to explore gene expression, gene sequencing, and molecular structure*" (Col. 1 lines 35-43). Consequently, the computerization of bioinformation data collection would enable users of Wical's system to more effectively manage collected data pertaining to human genes.

In response to applicant's argument that the examiner's conclusion of obviousness is based upon improper hindsight reasoning, it must be recognized that any judgment on obviousness is in a sense necessarily a reconstruction based upon hindsight reasoning. But so long as it takes into account only knowledge which was within the level of ordinary skill at the time the claimed invention was made, and does not include knowledge gleaned only from the applicant's disclosure, such a reconstruction is proper. See *In re McLaughlin*, 443 F.2d 1392, 170 USPQ 209 (CCPA 1971).

In light of the foregoing arguments, the 35 U.S.C 103 rejection is hereby sustained.

Conclusion

14. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Khanh B. Pham whose telephone number is (703) 308-7299. The examiner can normally be reached on Monday through Friday 7:30am to 4:00pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, John E Breene can be reached on (703) 305-9790. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Khanh B. Pham
Examiner
Art Unit 2177

KBP
April 6, 2004

SRIRAMA CHANNAVAJJALA
PRIMARY EXAMINER